

THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY & EXHIBITS

OF

ANTHONY D. BRISENO

AUGUST 17, 2018



DOCKET NO. 2018-3-E

**ANNUAL REVIEW OF BASE RATES FOR
FUEL COSTS OF DUKE ENERGY
CAROLINAS, LLC**

DIRECT TESTIMONY AND EXHIBITS OF

ANTHONY D. BRISENO

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2018-3-E

IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF

DUKE ENERGY CAROLINAS, LLC

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Anthony D. Briseno. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the South Carolina Office of Regulatory Staff ("ORS") as an Auditor.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received my Bachelor of Science in Business Administration in Accounting from Coastal Carolina University in August 2014. I received my Master of Accountancy Degree from Coastal Carolina University in August 2015. I also received a Graduate Certificate for completion of the Fraud Examination Program at Coastal Carolina University in August 2015. I began my employment as an auditor with ORS in October 2016 and have participated in various cases involving the regulation of electric, water and wastewater utilities.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?

A. Yes, I have previously testified before the Commission on the Fuel Adjustment Clause ("FAC") for the Duke Energy Progress, LLC ("DEP") Docket No. 2018-1-E.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present the results of ORS Audit Staff's examination of the books and records pertaining to Duke Energy Carolinas, LLC's ("DEC" or "Company") operations under the FAC. The current fuel examination covered the period of June 2017 through May 2018 ("actual review period"). For commission consideration, ORS has included the estimated, unaudited four (4) months from June 2018 through September 2018 ("estimated review period").

Q. WHAT WAS THE PURPOSE OF THIS EXAMINATION?

A. The purpose of this examination was to determine if the Company's accounting practices in computing and applying the monthly FAC complied with S.C. Code Ann. §§ 58-27-865, 58-39-140, 58-40-20, and prior commission orders.

Q. WHAT WAS THE SCOPE OF ORS'S EXAMINATION?

A. ORS Audit Staff examined and verified the monthly fuel adjustment factor calculations and the fuel recovery balances recorded in the Company's books and records. The Audit Staff's examination consisted of the following:

1. Analyzing the Fuel Stock Account

ORS Audit Staff's analysis of the fuel stock account consisted of verifying receipts to and issuances from the fuel management system to the general ledger, examining monthly fuel charges originating in fuel accounting, and ensuring only proper charges were entered in the Company's computation of fuel costs for purposes of adjusting the base fuel factor.

2. Sampling Receipts to the Fuel Stock Account

1 ORS Audit Staff's review of receipts to the fuel stock account consisted of examining
2 and testing selected transactions which support additions to the account. Each
3 transaction examined was tested for mathematical accuracy and vouched to a
4 commodity received report, corresponding waybill or truck bill, supplier invoice, base
5 cost report, freight invoice, and transportation cost report. Transactions were then
6 verified to a fuel management system payment voucher to verify payment of the correct
7 amount to the vendors.

8 3. Verifying Charges to Nuclear Fuel Expenses

9 ORS Audit Staff verified the amounts of nuclear fuel expense to the books and records
10 for the actual review period. Additionally, the accuracy of these amounts was verified
11 to the Company's amortization schedules.

12 4. Verifying Purchased and Interchange Power Fuel Cost

13 ORS Audit Staff verified the Company's purchased and interchange power fuel cost,
14 kilowatt-hour ("kWh") purchases, and kWh sales for the actual review period to the
15 Company's "Intersystem Purchase and Sales Transaction" reports, individual vendor
16 purchase schedules, and monthly invoices, on a sample basis. This verification included
17 intercompany power transactions related to the Joint Dispatch Agreement between the
18 Company and DEP. ORS recomputed the Company's sales and purchases for the actual
19 review period. The purchased and interchange power amounts for the actual review
20 period and the resultant (over)/under-recovery monthly deferred fuel amounts for the
21 period reflect calculations that conform to S.C. Code Ann. § 58-27-865, the statute
22 addressing fuel costs related to purchased power. Subsection (A)(2)(b) of this statute
23 states that the total delivered cost of economy purchases, including, but not limited to,

transmission charges, are included in purchased power costs if those purchases are “less than the purchasing utility’s avoided variable costs for the generation of an equivalent quantity of electric power.” ORS verified that the economic purchases were recorded at, or less than, the company’s applicable avoided costs.

5. Verifying kWh Sales

ORS Audit Staff verified total system kWh sales, as filed in the monthly fuel factor computation, to monthly billed revenue reports for the actual review period. The monthly kWh sales figures were then used to determine the fuel cost per kWh.

6. Recalculating the Fuel Adjustment Factors and Verifying the Deferred Fuel Costs

ORS Audit Staff recalculated the fuel costs for the actual review period utilizing information obtained from the Company’s records and verified these costs to the Company’s books and records. In recalculating the monthly fuel costs, ORS divided adjusted system fuel costs by adjusted system kWh sales to arrive at fuel costs per kWh sold. The fuel costs billed per kWh sold were then subtracted from the actual fuel cost per kWh sold to compute the deferred fuel cost. The actual deferred fuel costs for each month were then verified to the Company’s books and records.

7. Recalculating the True-up for the (Over)/Under-Recovered Fuel Costs

ORS Audit Staff analyzed and recomputed the cumulative (over)/under-recovery of the base fuel, environmental, capacity, Distributed Energy Resource Program (“DERP”) incremental, and DERP avoided costs for the actual review period and the cumulative (over)/under-recovery for the estimated review period.

Q. PLEASE EXPLAIN THE AUDIT EXHIBITS ATTACHED TO YOUR TESTIMONY.

A. ORS Audit Staff prepared the following audit exhibits from the Company's books and records:

AUDIT EXHIBIT ADB-1: TOTAL FUEL RECEIVED AND WEIGHTED AVERAGE COST

This audit exhibit details total received cost for the actual review period of \$1,092,212,987 for coal, #2 oil, and natural gas. ORS has also computed the weighted average cost of each type of fuel: coal (\$75.45 per ton), #2 oil (\$2.23 per gallon), and natural gas (\$4.13 per thousand cubic feet ("MCF")).

AUDIT EXHIBIT ADB-2: RECEIVED COAL - COST PER TON COMPARISON

This audit exhibit details the received cost per ton of coal for each month of the actual review period for DEC, DEP, and South Carolina Electric & Gas Company. For comparison purposes, ORS has shown the invoice cost per ton, freight cost per ton, total cost per ton, and the cost per thousand British thermal units ("MBTU").

AUDIT EXHIBIT ADB-3: COST OF FUEL BURNED FOR ELECTRIC GENERATION

This audit exhibit details the per book cost of fuel burned for electric generation during the actual review period. The burned cost of each class of fuel is shown separately along with its percentage of total burned costs. These costs are used in the computations of the base fuel costs component.

AUDIT EXHIBIT ADB-4: COST OF FUEL

This audit exhibit details ORS's computation of the total fuel cost applicable to the fuel recovery calculation. There are three (3) components included in this cost and they are as follows:

(1) Cost of Fuel Burned

(2) Fuel Cost of Purchased and Interchange Power

(3) Fuel Cost Recovered from Intersystem Sales

Cost of Fuel Burned – This amount is the total cost of all fossil and nuclear fuel burned during the actual review period and used in the base fuel costs component computation. A detailed breakdown of coal, #2 oil, natural gas, and nuclear fuel can be seen in Audit Exhibit ADB-3.

Fuel Cost of Purchased and Interchange Power – This amount is the total fuel cost of monthly kWh purchases from other electric utilities or power marketers.

Fuel Cost Recovered from Intersystem Sales – This amount is the total fuel cost recovery related to kWhs sold to other electric utilities or power marketers during the period.

AUDIT EXHIBIT ADB-5: DETAILS OF THE COMPUTATION OF THE (OVER)/UNDER-RECOVERY OF BASE FUEL COSTS

This audit exhibit details the (over)/under-recovery of base fuel cost computations for the actual and estimated review periods. The exhibit also shows the computations of the actual and estimated cumulative (over)/under-recovery balances and various adjustments for June 2017 through September 2018.

AUDIT EXHIBIT ADB-6: TOTAL ENVIROMENTAL COSTS

This audit exhibit details the total environmental costs for the actual review period for magnesium hydroxide, calcium carbonate and other sorbents, emission allowances, ammonia and urea, lime/limestone, and MerControl 8034 Plus. Additionally, the percentage of total cost is shown for each environmental component.

**AUDIT EXHIBIT ADB-7: DETAILS OF THE COMPUTATION OF THE
(OVER)/UNDER-RECOVERY OF ENVIRONMENTAL COSTS**

This audit exhibit details the (over)/under-recovery of environmental cost computations by month for the actual and estimated review periods for total environmental costs and off-system sales. This exhibit also shows the computation of the cumulative (over)/under-recovery of environmental costs for June 2017 through September 2018.

**AUDIT EXHIBIT ADB-8: DETAILS OF THE COMPUTATION OF THE
(OVER)/UNDER-RECOVERY OF CAPACITY COSTS**

This audit exhibit details the (over)/under-recovery of Public Utility Regulatory Policy Act of 1978 ("PURPA") purchased power avoided capacity costs and natural gas capacity costs by month for the actual and estimated review periods. Due to the enactment of Act 236, effective June 2014, the avoided capacity component of PURPA purchased power costs and the natural gas capacity costs are now allocated and recovered as a separate component of the overall fuel factor in the same manner as environmental costs. This exhibit also shows the computation of the cumulative (over)/under-recovery of capacity costs for June 2017 through September 2018.

**AUDIT EXHIBIT ADB-9: DETAILS OF THE COMPUTATION OF THE
(OVER)/UNDER-RECOVERY OF DERP INCREMENTAL COSTS**

This audit exhibit details the (over)/under-recovery of DERP incremental costs by month for the actual and estimated review periods. This audit exhibit also shows the computation of the cumulative (over)/under-recovery of DERP incremental costs for June 2017 through September 2018. DERP incremental costs are further explained in the testimony of ORS witness Johnson.

**AUDIT EXHIBIT ADB-10: DETAILS OF THE COMPUTATION OF THE
(OVER)/UNDER-RECOVERY OF DERP AVOIDED COSTS**

This audit exhibit details the (over)/under-recovery of DERP avoided costs computations by month for the actual and estimated review periods. This audit exhibit also shows the computations of the cumulative (over)/under-recovery of DERP avoided costs for June 2017 through September 2018. DERP avoided costs are further explained in the testimony of ORS witness Johnson.

**Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE
CUMULATIVE (OVER)/UNDER-RECOVERY OF BASE FUEL COSTS IN AUDIT
EXHIBIT ADB-5.**

A. ORS Audit Exhibit ADB-5 provides details of ORS's calculation of the actual cumulative under-recovery balance through May 2018 of \$64,403,063, and the estimated cumulative under-recovery balance through September 2018 of \$75,453,306. Company witness McGee's testimony (Exhibit 2, pages 1-2) reports a cumulative under-recovery balance through May 2018 of \$64,562,410, and the estimated cumulative under-recovery balance through September 2018 of \$75,612,654. The differences between ORS's and the Company's ending balances for May 2018 and September 2018 are due to ORS accounting adjustment (D) and rounding.

**Q. DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING
EITHER THE ACTUAL OR THE ESTIMATED REVIEW PERIODS FOR THE
BASE FUEL COSTS COMPONENT?**

A. Yes. The Company made the following adjustment as shown on Audit Exhibit ADB-5:

Adjustment (A) – True-Up to Billing System Details

In March 2018, the Company made an under-recovery adjustment of \$5,807 to account for the true-up of base fuel related costs to billing system details. This adjustment is explained further in the testimony of ORS witness Johnson. ORS agrees with the Company's adjustment to the base fuel costs component.

Adjustment (B) – True-up to the Value of Solar

In April 2018, the Company made an under-recovery adjustment of \$80,739 to account for the true-up of base fuel related costs to the value of solar. This adjustment is explained further in the testimony of ORS witness Johnson. ORS agrees with the Company's adjustment to the base fuel costs component.

Adjustment (C) – Purchased Power

In May 2018, the Company made an over-recovery adjustment of \$66,306 to account for the differences between actual and estimated economic purchased power costs and revisions for those purchases with costs exceeding DEC's avoided variable cost. ORS agrees with the Company's adjustment to the base fuel costs component.

Q. DID THE ORS MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING EITHER THE ACTUAL OR THE ESTIMATED REVIEW PERIODS FOR THE BASE FUEL COSTS COMPONENT?

A. Yes. The ORS made the following adjustment as shown on Audit Exhibit ADB-5:

Adjustment (D) – Oconee Outage

In May 2018, the ORS made an over-recovery adjustment in the amount of \$159,352 for South Carolina's portion of the replacement power cost for the outage at DEC's Oconee

Unit 3 during July 2017. This adjustment is explained further in the testimony of ORS witness Schellinger.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF ENVIRONMENTAL COSTS IN AUDIT EXHIBIT ADB-7.

A. ORS Audit Exhibit ADB-7 provides details of ORS's calculation of the actual cumulative environmental cost over-recovery balance through May 2018 of \$1,461,868, and the estimated cumulative over-recovery balance through September 2018 of \$1,425,966. Company witness McGee's testimony (Exhibit 4, pages 1a through 3b) reports a cumulative environmental cost over-recovery balance through May 2018 of \$1,461,871, and the estimated cumulative over-recovery balance through September 2018 of \$1,425,968. The differences between ORS's and the Company's ending balances for May 2018 and September 2018 are due to rounding.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF CAPACITY COSTS IN AUDIT EXHIBIT ADB-8.

A. ORS Audit Exhibit ADB-8 provides details of ORS's calculation of the actual cumulative capacity cost over-recovery balance through May 2018 of \$910,631, and the estimated cumulative over-recovery through September 2018 of \$396,890. Company witness McGee's testimony (Exhibit 6, pages 1a through 3b) reports a cumulative over-recovery balance through May 2018 of \$910,630, and the estimated cumulative over-recovery balance through September 2018 of \$396,889. The differences between ORS's

and the Company's ending balances for May 2018 and September 2018 are due to rounding.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF DERP INCREMENTAL COSTS IN AUDIT EXHIBIT ADB-9.

A. ORS Audit Exhibit ADB-9 provides details of ORS's calculation of the actual cumulative DERP incremental cost over-recovery balance through May 2018 of \$966,262, and the estimated cumulative under-recovery balance through September 2018 of \$1,724,815. Company witness McGee's testimony (Exhibit 8) reports a cumulative over-recovery balance through May 2018 of \$966,265, and the estimated cumulative under-recovery balance through September 2018 of \$1,724,810. The differences between ORS's and the Company's ending balances for May 2018 and September 2018 are due to rounding.

Q. DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING EITHER THE ACTUAL OR THE ESTIMATED REVIEW PERIODS FOR THE DERP INCREMENTAL COST COMPONENT?

A. Yes. The Company made the following adjustments as shown on Audit Exhibit ADB-9:

Adjustment (E) – True-up to Billing System Details

In March 2018, the Company made an over-recovery adjustment in the amount of \$20,337 to account for an error in their billing system. This adjustment is explained further in the testimony of ORS witness Johnson. ORS agrees with the Company's adjustment to the DERP incremental costs component.

Adjustment (F) – True-up Value of Solar

In April 2018, the Company made an under-recovery adjustment in the amount of \$310,604 to account for an error in the calculation of the Net Energy Metering (“NEM”) cost components. This adjustment is explained further in the testimony of ORS witness Johnson. ORS agrees with the Company’s adjustment to the DERP incremental costs component.

Adjustment (G) – Removal of DERP Expenses

In May 2018, the Company made an over-recovery adjustment in the amount of \$4,649 to account for shared solar expenses that should have been booked to DEP and to remove expenses not associated with DERP. ORS agrees with the Company’s adjustment to the DERP incremental costs component.

Q. PLEASE EXPLAIN ORS AUDIT STAFF’S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF DERP AVOIDED COSTS IN AUDIT EXHIBIT ADB-10.

A. ORS Audit Exhibit ADB-10 provides details of the ORS’s calculation of the actual cumulative DERP avoided cost over-recovery balance through May 2018 of \$24,301, and the estimated cumulative under-recovery balance through September 2018 of \$19,458. Company witness McGee’s testimony (Exhibit 12, pages 1 through 3) reports a cumulative over-recovery balance through May 2018 of \$24,303, and the estimated cumulative under-recovery balance through September 2018 of \$19,456. The differences between ORS’s and the Company’s ending balances for May 2018 and September 2018 are due to rounding.

Q. WHAT IS THE RESULT OF ORS’S EXAMINATION?

1 A. Based on ORS's examination of the Company's books and records, and the
2 Company's operations under the fuel cost recovery mechanism, ORS determined that,
3 subject to ORS's accounting adjustments, the Company's accounting practices are in
4 compliance with S.C. Code Ann. §§ 58-27-865, 58-39-140, 58-40-20, and prior
5 commission orders.

6 Based on ORS's examination, ORS agrees with the following (over)/under-recovery
7 balances as stated by DEC:

- 8 • May 2018 environmental cost component over-recovery balance of \$1,461,871;
- 9 • May 2018 capacity cost component over-recovery balance of \$910,630;
- 10 • May 2018 DERP incremental cost component over-recovery balance of \$966,265;
- 11 • May 2018 DERP avoided cost component over-recovery balance of \$24,303;
- 12 • September 2018 environmental cost component over-recovery balance of
13 \$1,425,968;
- 14 • September 2018 capacity cost component over-recovery balance of \$396,889;
- 15 • September 2018 DERP incremental cost component under-recovery balance of
16 \$1,724,810; and
- 17 • September 2018 DERP avoided cost component under-recovery balance of
18 \$19,456.

19 Based on ORS's examination, ORS calculated the following adjusted under-recovery
20 balances for DEC:

- 21 • May 2018 base fuel costs component under-recovery balance of \$64,403,063; and
- 22 • September 2018 base fuel costs component under-recovery balance of \$75,453,306

23 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

1 **A.** Yes, it does.

Office of Regulatory Staff
Total Fuel Received and Weighted Average Cost
Duke Energy Carolinas, LLC
For Year Ending May 2018
Docket No. 2018-3-E

<u>Month</u>	<u>Coal</u>	<u>#2 Oil</u>		<u>Natural Gas</u>		<u>Total Received</u>
	<u>Ton</u>	<u>\$</u>	<u>Gal</u>	<u>\$</u>	<u>MCF</u>	<u>Cost</u>
Jun-17	799,978	60,888,996	529,031	799,635	6,179,665	\$ 84,445,100
Jul-17	921,055	68,634,917	503,942	801,207	7,628,095	96,540,008
Aug-17	986,295	72,480,014	631,164	1,086,466	6,979,084	98,356,906
Sep-17	784,392	57,990,721	547,683	1,079,878	6,676,014	82,815,740
Oct-17	601,152	45,196,052	698,485	1,313,234	7,118,152	72,159,957
Nov-17	473,752	35,489,440	917,950	1,849,361	7,974,424	66,971,364
Dec-17	641,256	47,939,490	1,032,151	2,112,772	6,563,643	78,529,115
Jan-18	514,145	39,178,930	14,071,110	33,372,223	6,449,085	139,247,480
Feb-18	770,299	57,769,435	348,712	725,089	6,331,026	85,206,781
Mar-18	867,148	66,574,834	739,183	1,457,219	9,799,735	102,923,321
Apr-18	741,294	57,442,644	414,006	881,581	10,281,315	93,122,161
May-18	723,582	56,253,780	858,215	1,973,513	9,784,044	91,895,054
Total	8,824,348	\$ 665,839,253	21,291,632	\$ 47,452,178	91,764,282	\$ 378,921,556
Weighted Average Cost	\$	75.45	\$	2.23	\$	4.13

Office of Regulatory Staff
Received Coal - Cost Per Ton Comparison
Duke Energy Carolinas, LLC
For Year Ending May 2018
Docket No. 2018-3-E

Month	Duke Energy Carolinas, LLC					Duke Energy Progress, LLC ¹					South Carolina Electric & Gas Company ¹				
	Invoice Cost Per Ton \$	Freight Cost Per Ton \$	Total Cost Per Ton \$	Cost Per MBTU \$		Invoice Cost Per Ton \$	Freight Cost Per Ton \$	Total Cost Per Ton \$	Cost Per MBTU \$		Invoice Cost Per Ton \$	Freight Cost Per Ton \$	Total Cost Per Ton \$	Cost Per MBTU \$	
Jun-17	47.14	30.44	77.58	3.12		49.79	32.16	81.95	3.21		54.08	25.87	79.95	3.14	
Jul-17	46.81	27.05	73.86	2.98		48.23	30.13	78.36	3.11		53.87	27.03	80.90	3.18	
Aug-17	46.04	26.85	72.89	2.93		48.90	31.41	80.31	3.13		53.63	27.14	80.77	3.18	
Sep-17	46.35	27.59	73.94	2.96		48.47	31.50	79.97	3.13		54.64	30.70	85.34	3.35	
Oct-17	45.76	28.90	74.66	3.04		48.81	32.77	81.58	3.21		54.95	28.31	83.26	3.29	
Nov-17	47.00	27.68	74.68	3.08		48.40	30.29	78.69	3.11		55.31	30.31	85.62	3.39	
Dec-17	47.97	29.04	77.01	3.13		43.45	30.80	74.25	2.92		54.89	29.69	84.58	3.32	
Jan-18	46.67	27.11	73.78	3.11		50.93	32.32	83.25	3.31		55.81	30.41	86.22	3.39	
Feb-18	47.35	26.22	73.57	3.03		46.16	32.56	78.72	3.10		57.57	30.94	88.51	3.51	
Mar-18	47.89	27.67	75.56	3.14		45.59	25.65	71.24	2.93		56.50	25.87	82.37	3.24	
Apr-18	47.25	29.49	76.74	3.17		46.98	35.20	82.18	3.38		56.50	26.18	82.68	3.27	
May-18	47.78	29.74	77.52	3.20		47.65	26.89	74.54	3.09		54.80	24.73	79.53	3.13	

¹ Cost information for Duke Energy Progress, LLC and South Carolina Electric & Gas Company has not been audited as part of this docket.

Office of Regulatory Staff
Cost of Fuel Burned for Electric Generation
Duke Energy Carolinas, LLC
For Year Ending May 2018
Docket No. 2018-3-E

<u>Month</u>	<u>Coal</u>	<u>#2 Oil</u>	<u>Natural Gas</u>	<u>Nuclear</u>	<u>Total Burned Cost</u>
Jun-17	\$ 74,053,883	\$ 775,525	\$ 22,756,469	\$ 26,745,146	\$ 124,331,023
Jul-17	\$ 99,733,960	\$ 695,393	\$ 27,103,884	\$ 27,446,315	\$ 154,979,552
Aug-17	\$ 84,113,594	\$ 1,252,134	\$ 24,705,273	\$ 27,638,720	\$ 137,709,721
Sep-17	\$ 49,922,190	\$ 997,630	\$ 23,628,561	\$ 24,556,576	\$ 99,104,957
Oct-17	\$ 45,698,574	\$ 1,070,748	\$ 22,405,227	\$ 21,980,499	\$ 91,155,048
Nov-17	\$ 37,735,545	\$ 1,917,607	\$ 26,573,652	\$ 21,349,394	\$ 87,576,198
Dec-17	\$ 52,649,662	\$ 2,537,122	\$ 25,941,334	\$ 25,331,093	\$ 106,459,211
Jan-18	\$ 95,538,124	\$ 26,747,842	\$ 64,043,518	\$ 25,328,094	\$ 211,657,578
Feb-18	\$ 27,994,141	\$ 999,168	\$ 24,078,578	\$ 22,598,045	\$ 75,669,932
Mar-18	\$ 55,006,481	\$ 1,424,117	\$ 31,666,455	\$ 24,578,819	\$ 112,675,872
Apr-18	\$ 35,585,147	\$ 772,525	\$ 30,032,289	\$ 21,841,292	\$ 88,231,253
May-18	\$ 62,287,231	\$ 2,191,224	\$ 28,854,184	\$ 22,287,681	\$ 115,620,320
Total	\$ 720,318,532	\$ 41,381,035	\$ 351,789,424	\$ 291,681,674	\$ 1,405,170,665

Office of Regulatory Staff
Cost of Fuel
Duke Energy Carolinas, LLC
For Year Ending May 2018
Docket No. 2018-3-E

<u>Month</u>	<u>Cost of Fuel Burned</u>	<u>Fuel Cost of Purchased and Interchange Power</u>	<u>Fuel Cost Recovered from Intersystem Sales</u>	<u>Total Fuel Costs</u>
Jun-17	\$ 124,331,023	\$ 19,587,051	\$ (3,519,115)	\$ 140,398,959
Jul-17	\$ 154,979,552	\$ 22,824,202	\$ (2,570,668)	\$ 175,233,086
Aug-17	\$ 137,709,721	\$ 26,325,101	\$ (3,519,164)	\$ 160,515,658
Sep-17	\$ 99,104,957	\$ 29,912,919	\$ (2,967,228)	\$ 126,050,648
Oct-17	\$ 91,155,048	\$ 29,278,891	\$ (2,282,072)	\$ 118,151,867
Nov-17	\$ 87,576,198	\$ 32,879,990	\$ (1,386,869)	\$ 119,069,319
Dec-17	\$ 106,459,211	\$ 37,025,101	\$ (3,717,078)	\$ 139,767,234
Jan-18	\$ 211,657,578	\$ 79,890,215	\$ (29,455,868)	\$ 262,091,925
Feb-18	\$ 75,669,932	\$ 29,270,015	\$ (617,598)	\$ 104,322,349
Mar-18	\$ 112,675,872	\$ 18,187,799	\$ (6,816,999)	\$ 124,046,672
Apr-18	\$ 88,231,253	\$ 16,426,857	\$ (6,866,338)	\$ 97,791,772
May-18	\$ 115,620,320	\$ 17,451,954	\$ (4,418,907)	\$ 128,653,367
Total	\$ 1,405,170,665	\$ 359,060,095	\$ (68,137,904)	\$ 1,696,092,856

Office of Regulatory Staff
Details of the Computation of the (Over)/Under-Recovery of Base Fuel Costs
Duke Energy Carolinas, LLC
June 2017 - September 2018
Docket No. 2018-3-E

	Actual											
	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018				
Total Fuel Costs	\$ 140,398,959	\$ 175,233,086	\$ 160,515,658	\$ 126,050,648	\$ 118,151,867	\$ 119,069,319	\$ 139,767,234	\$ 262,091,925				
Avoided Fuel Benefit of SC NEM	\$ 109,646	\$ 117,273	\$ 124,941	\$ 129,910	\$ 131,350	\$ 132,631	\$ 141,744	\$ 188,837				
Adjusted System Fuel Costs	\$ 140,508,605	\$ 175,350,359	\$ 160,640,599	\$ 126,180,558	\$ 118,283,217	\$ 119,201,950	\$ 139,908,978	\$ 262,280,762				
Total System kWh Sales	7,382,797,362	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	7,057,410,509	8,697,594,873				
NEM Solar Generation kWh	3,385,344	3,620,824	3,857,580	4,010,932	4,057,468	4,097,904	4,379,391	5,835,058				
Adjusted System kWh Sales	7,386,182,606	8,217,318,035	8,246,356,880	7,636,553,967	6,672,440,753	6,414,671,902	7,061,789,900	8,703,429,931				
Fuel Costs per kWh Sales	\$ 0.019023	\$ 0.021339	\$ 0.019480	\$ 0.016523	\$ 0.017727	\$ 0.018583	\$ 0.019812	\$ 0.030135				
S.C. Retail kWh Sales	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	1,689,291,924	2,004,246,555				
NEM Solar Generation kWh	3,385,344	3,620,824	3,857,580	4,010,932	4,057,468	4,097,904	4,379,391	5,835,058				
Adjusted S.C. Retail kWh Sales	1,844,172,671	2,008,247,468	2,049,570,261	1,911,270,334	1,668,837,022	1,608,408,997	1,693,671,315	2,010,081,613				
S.C. Base Fuel Costs	\$ 35,082,010	\$ 42,854,240	\$ 39,926,018	\$ 31,580,365	\$ 29,583,689	\$ 29,888,588	\$ 33,555,207	\$ 60,574,479				
Avoided Fuel Benefit of S.C. NEM	\$ (109,646)	\$ (117,273)	\$ (124,941)	\$ (129,910)	\$ (131,350)	\$ (132,631)	\$ (141,744)	\$ (188,837)				
Adjusted S.C. Base Fuel Costs	\$ 34,972,364	\$ 42,736,967	\$ 39,801,077	\$ 31,450,455	\$ 29,452,339	\$ 29,755,957	\$ 33,413,463	\$ 60,385,642				
S.C. Retail Fuel Costs Collected	\$ 29,226,181	\$ 31,827,457	\$ 32,479,779	\$ 30,281,558	\$ 27,411,581	\$ 27,695,070	\$ 29,174,071	\$ 34,613,338				
Fuel Benefits in DERP NEM Incentive	\$ (32,924)	\$ (35,221)	\$ (37,544)	\$ (39,035)	\$ (53,061)	\$ (64,364)	\$ (68,793)	\$ (92,254)				
Adjusted S.C. Retail Costs Collected	\$ 29,193,257	\$ 31,792,236	\$ 32,442,235	\$ 30,242,523	\$ 27,358,520	\$ 27,630,706	\$ 29,105,278	\$ 34,521,084				
Deferred Fuel Entry- (Over)/Under-Recovery	\$ 5,779,107	\$ 10,944,731	\$ 7,358,842	\$ 1,207,932	\$ 2,093,819	\$ 2,125,251	\$ 4,308,185	\$ 25,864,558				
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Cumulative (Over)/Under-Recovery Prior Month	\$ 7,670,353	\$ 13,449,460	\$ 24,394,191	\$ 32,960,965	\$ 35,054,784	\$ 37,180,035	\$ 41,488,220	\$ 67,352,778				
Cumulative (Over)/Under-Recovery	\$ 13,449,460	\$ 24,394,191	\$ 31,753,033	\$ 32,960,965	\$ 35,054,784	\$ 37,180,035	\$ 41,488,220	\$ 67,352,778				

Office of Regulatory Staff
Details of the Computation of the (Over)/Under-Recovery of Base Fuel Costs
Duke Energy Carolinas, LLC
June 2017 - September 2018
Docket No. 2018-3-E

	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018
Total Fuel Costs	\$ 104,322,349	\$ 124,046,672	\$ 97,791,772	\$ 128,653,367	\$ 148,000,217	\$ 166,177,129	\$ 157,600,177	\$ 125,880,878
Avoided Fuel Benefit of SC NEM	\$ 190,035	\$ 203,056	\$ 274,934	\$ 299,867	\$ 313,345	\$ 325,081	\$ 333,368	\$ 341,589
Adjusted System Fuel Costs	\$ 104,512,384	\$ 124,249,728	\$ 98,066,706	\$ 128,953,234	\$ 148,313,562	\$ 166,502,210	\$ 157,933,545	\$ 126,222,467
Total System kWh Sales	7,453,819,034	6,443,723,578	6,581,829,396	6,581,963,808	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000
NEM Solar Generation kWh	5,872,084	6,274,434	8,499,697	9,270,530	9,687,187	10,049,999	10,306,180	10,560,367
Adjusted System kWh Sales	7,459,691,118	6,449,998,012	6,590,329,093	6,591,233,338	7,407,253,909	8,230,547,570	8,419,868,378	8,005,353,367
Fuel Costs per kWh Sales	\$ 0.014010	\$ 0.019264	\$ 0.014880	\$ 0.019564	\$ 0.020023	\$ 0.020230	\$ 0.018757	\$ 0.015767
S.C. Retail kWh Sales	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127
NEM Solar Generation kWh	5,872,084	6,274,434	8,499,697	9,270,530	9,687,187	10,049,999	10,306,180	10,560,367
Adjusted S.C. Retail kWh Sales	1,797,578,431	1,530,279,092	1,593,258,559	1,649,722,480	1,839,547,824	1,989,969,609	2,064,263,104	1,996,723,494
S.C. Base Fuel Costs	\$ 25,184,583	\$ 29,478,577	\$ 23,708,318	\$ 32,275,758	\$ 36,832,799	\$ 40,256,657	\$ 38,719,891	\$ 31,482,852
Avoided Fuel Benefit of S.C. NEM	\$ (190,035)	\$ (203,056)	\$ (274,934)	\$ (299,867)	\$ (313,345)	\$ (325,081)	\$ (333,368)	\$ (341,589)
Adjusted S.C. Base Fuel Costs	\$ 24,994,548	\$ 29,275,521	\$ 23,433,384	\$ 31,975,891	\$ 36,519,454	\$ 39,931,576	\$ 38,386,523	\$ 31,141,263
S.C. Retail Fuel Costs Collected	\$ 30,942,769	\$ 26,319,560	\$ 27,368,786	\$ 28,330,604	\$ 31,601,693	\$ 34,193,212	\$ 35,471,836	\$ 34,301,037
Fuel Benefits in DERP NEM Incentive	\$ (92,837)	\$ (99,216)	\$ (133,731)	\$ (145,988)	\$ (152,519)	\$ (158,211)	\$ (162,233)	\$ (166,242)
Adjusted S.C. Retail Costs Collected	\$ 30,849,932	\$ 26,220,344	\$ 27,235,055	\$ 28,184,616	\$ 31,449,174	\$ 34,035,001	\$ 35,309,603	\$ 34,134,795
Deferred Fuel Entry- (Over)/Under-Recovery	\$ (5,855,384)	\$ 3,055,177	\$ (3,801,671)	\$ 3,791,275	\$ 5,070,280	\$ 5,896,575	\$ 3,076,920	\$ (2,993,532)
Company Accounting Adjustments	\$ -	\$ 5,807	\$ (A)	\$ (B)	\$ -	\$ -	\$ -	\$ -
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ (159,352)	\$ -	\$ -	\$ -	\$ -
Cumulative (Over)/Under-Recovery Prior Month	\$ 67,352,778	\$ 61,497,394	\$ 64,558,378	\$ 60,837,446	\$ 64,403,063	\$ 69,473,343	\$ 75,369,918	\$ 78,446,838
Cumulative (Over)/Under-Recovery	\$ 61,497,394	\$ 64,558,378	\$ 60,837,446	\$ 64,403,063	\$ 69,473,343	\$ 75,369,918	\$ 78,446,838	\$ 75,453,306

Explanations of Adjustments (A), (B), (C) and (D) are included in testimony of Anthony D. Briscoe.

	May 2018	September 2018
Cumulative (Over)/Under Base Fuel Costs Component (Audit Exhibit ADB-5)	\$ 64,403,063	\$ 75,453,306
Cumulative (Over)/Under Environmental Costs Component (Audit Exhibit ADB-7)	\$ (1,461,868)	\$ (1,425,966)
Cumulative (Over)/Under Capacity Costs Component (Audit Exhibit ADB-8)	\$ (910,631)	\$ (396,890)
Cumulative (Over)/Under DERP Incremental Costs Component (Audit Exhibit ADB-9)	\$ (966,262)	\$ 1,724,815
Cumulative (Over)/Under DERP Avoided Costs Component (Audit Exhibit ADB-10)	\$ (24,301)	\$ 19,458
Net Cumulative (Over)/Under-Recovery Balance	\$ 1,040,001	\$ 75,374,723

Office of Regulatory Staff
Total Environmental Costs
Duke Energy Carolinas, LLC
For Year Ending May 2018
Docket No. 2018-3-E

<u>Month</u>	<u>Magnesium Hydroxide, Calcium Carbonate, and Other Sorbents</u>	<u>Emission Allowances</u>	<u>Ammonia and Urea</u>	<u>Lime/Limestone</u>	<u>MerControl 8034 Plus</u>	<u>Total Environmental Costs</u>
Jun-17	\$ 202,149 9.45%	\$ (172,533) -8.07%	\$ 265,764 12.44%	\$ 1,841,806 86.18%	\$ - 0.00%	\$ 2,137,186
Jul-17	\$ 277,517 7.90%	\$ 529 0.01%	\$ 583,308 16.61%	\$ 2,651,375 75.48%	\$ - 0.00%	\$ 3,512,729
Aug-17	\$ 300,560 8.68%	\$ 748 0.02%	\$ 734,775 21.24%	\$ 2,353,962 68.03%	\$ 70,082 2.03%	\$ 3,460,127
Sep-17	\$ 148,114 6.70%	\$ 723 0.03%	\$ 513,431 23.25%	\$ 1,476,925 66.86%	\$ 69,862 3.16%	\$ 2,209,055
Oct-17	\$ 120,170 7.37%	\$ (4,667) -0.29%	\$ 235,454 14.43%	\$ 1,315,905 80.66%	\$ (35,383) -2.17%	\$ 1,631,479
Nov-17	\$ 197,531 13.85%	\$ 350 0.02%	\$ 203,627 14.27%	\$ 1,025,394 71.86%	\$ - 0.00%	\$ 1,426,902
Dec-17	\$ 242,317 17.10%	\$ 828 0.06%	\$ 72,877 5.14%	\$ 1,101,725 77.70%	\$ - 0.00%	\$ 1,417,747
Jan-18	\$ 268,903 6.32%	\$ 384 0.01%	\$ 1,588,589 37.37%	\$ 2,393,471 56.30%	\$ - 0.00%	\$ 4,251,347
Feb-18	\$ 154,283 10.46%	\$ (39,417) -2.67%	\$ 520,956 35.32%	\$ 839,085 56.89%	\$ - 0.00%	\$ 1,474,907
Mar-18	\$ 239,735 14.89%	\$ 4,193 0.26%	\$ (245,280) -15.23%	\$ 1,610,972 100.08%	\$ - 0.00%	\$ 1,609,620
Apr-18	\$ 79,017 5.71%	\$ 330 0.02%	\$ 202,372 14.64%	\$ 1,100,998 79.63%	\$ - 0.00%	\$ 1,382,717
May-18	\$ 221,118 10.02%	\$ (43,802) -1.99%	\$ 155,626 7.06%	\$ 1,872,920 84.91%	\$ - 0.00%	\$ 2,205,862
Totals	\$2,451,414 9.17%	\$ (252,334) -0.94%	\$ 4,831,499 18.08%	\$ 19,584,538 73.30%	\$ 104,561 0.39%	\$ 26,719,678

Office of Regulatory Staff
Details of the Computation of the (Over)/Under-Recovery of Environmental Costs
Duke Energy Carolinas, LLC
June 2017 - September 2018
Docket No. 2018-3-E

	Actual									
	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018		
Total Environmental Costs	\$ 2,137,186	\$ 3,512,729	\$ 3,460,127	\$ 2,209,055	\$ 1,631,479	\$ 1,426,902	\$ 1,417,747	\$ 4,251,347		
Environmental Costs Recovered Through Off-System Sales	\$ (90,659)	\$ (59,768)	\$ (63,757)	\$ (31,721)	\$ (14,835)	\$ (1,203)	\$ (7,727)	\$ (20,446)		
Net Environmental Costs	\$ 2,046,527	\$ 3,452,961	\$ 3,396,370	\$ 2,177,334	\$ 1,616,644	\$ 1,425,699	\$ 1,410,020	\$ 4,230,901		
S.C. Retail kWh Sales	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	1,689,291,924	2,004,246,555		
Total System kWh Sales Excluding Off-System Sales	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	7,057,410,509	8,697,594,873		
S.C. Allocation Factor	24.93%	24.41%	24.82%	24.99%	24.97%	25.03%	23.94%	23.04%		
S.C. Retail Basis of Total Environmental Costs	\$ 510,270	\$ 842,726	\$ 842,948	\$ 544,084	\$ 403,599	\$ 356,796	\$ 337,508	\$ 974,956		
Amounts Billed to Retail Customers (Over)/Under-Recovery	\$ 162,855	\$ 197,696	\$ 197,984	\$ 174,752	\$ 308,910	\$ 516,347	\$ 550,231	\$ 661,325		
Company Accounting Adjustments	\$ 347,415	\$ 645,030	\$ 644,964	\$ 369,332	\$ 94,689	\$ (159,551)	\$ (212,723)	\$ 313,631		
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Cumulative (Over)/Under-Recovery Prior Month	\$ (2,985,686)	\$ (2,638,271)	\$ (1,993,241)	\$ (1,348,277)	\$ (978,945)	\$ (884,256)	\$ (1,043,807)	\$ (1,256,530)		
Cumulative (Over)/Under-Recovery	\$ (2,638,271)	\$ (1,993,241)	\$ (1,348,277)	\$ (978,945)	\$ (884,256)	\$ (1,043,807)	\$ (1,256,530)	\$ (942,899)		

Office of Regulatory Staff
Details of the Computation of the (Over)/Under-Recovery of Environmental Costs
Duke Energy Carolinas, LLC
June 2017 - September 2018
Docket No. 2018-3-E

	Actual				Estimated			
	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018
Total Environmental Costs	\$ 1,474,907	\$ 1,609,620	\$ 1,382,717	\$ 2,205,862	\$ 2,587,408	\$ 3,205,022	\$ 2,979,261	\$ 1,979,394
Environmental Costs Recovered Through Off-System Sales	\$ (1,662)	\$ (16,082)	\$ (16,396)	\$ (21,941)	\$ (10,786)	\$ (31,105)	\$ (42,519)	\$ (23,963)
Net Environmental Costs	\$ 1,473,245	\$ 1,593,538	\$ 1,366,321	\$ 2,183,921	\$ 2,576,622	\$ 3,173,917	\$ 2,936,742	\$ 1,955,431
S.C. Retail kWh Sales	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127
Total System kWh Sales Excluding Off-System Sales	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000
S.C. Allocation Factor	24.04%	23.65%	24.08%	24.92%	24.74%	24.09%	24.42%	24.84%
S.C. Retail Basis of Total Environmental Costs	\$ 354,130	\$ 376,888	\$ 328,980	\$ 544,308	\$ 637,353	\$ 764,443	\$ 717,272	\$ 485,792
Amounts Billed to Retail Customers (Over)/Under-Recovery	\$ 584,868	\$ 495,221	\$ 513,174	\$ 530,012	\$ 596,262	\$ 650,086	\$ 672,151	\$ 650,459
Company Accounting Adjustments	\$ (230,738)	\$ (118,333)	\$ (184,194)	\$ 14,296	\$ 41,091	\$ 114,357	\$ 45,121	\$ (164,667)
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cumulative (Over)/Under-Recovery Prior Month	\$ (942,899)	\$ (1,173,637)	\$ (1,291,970)	\$ (1,476,164)	\$ (1,461,868)	\$ (1,420,777)	\$ (1,306,420)	\$ (1,261,299)
Cumulative (Over)/Under-Recovery	\$ (1,173,637)	\$ (1,291,970)	\$ (1,476,164)	\$ (1,461,868)	\$ (1,420,777)	\$ (1,306,420)	\$ (1,261,299)	\$ (1,425,966)

Office of Regulatory Staff
 Details of the Computation of the (Over)/Under-Recovery of Capacity Costs
 Duke Energy Carolinas, LLC
 June 2017 - September 2018
 Docket No. 2018-3-E

	Actual										
	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018			
PURPA Purchased Power Capacity Costs	\$ 2,189,401	\$ 6,535,281	\$ 6,524,417	\$ 3,690,329	\$ 2,965,616	\$ 1,128,821	\$ 848,469	\$ 1,196,326			
Natural Gas Capacity Costs	\$ -	\$ -	\$ -	\$ -	\$ 3,156,575	\$ 2,872,247	\$ 2,358,419	\$ 2,439,779			
Total Costs for the current month	\$ 2,189,401	\$ 6,535,281	\$ 6,524,417	\$ 3,690,329	\$ 6,122,191	\$ 4,001,068	\$ 3,206,888	\$ 3,636,105			
S.C. Retail kWh Sales	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	1,689,291,924	2,004,246,555			
Total System kWh Sales Excluding Off-System Sales	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	7,057,410,509	8,697,594,873			
S.C. Allocation Factor	24.93%	24.41%	24.82%	24.99%	24.97%	25.03%	23.94%	23.04%			
S.C. Share of Capacity Costs	\$ 545,894	\$ 1,594,994	\$ 1,619,300	\$ 922,159	\$ 1,528,421	\$ 1,001,308	\$ 767,614	\$ 837,893			
Amount Billed to Retail Customers	\$ 767,675	\$ 886,964	\$ 895,858	\$ 809,910	\$ 997,306	\$ 1,370,773	\$ 1,504,549	\$ 1,877,341			
(Over)/Under-Recovery	\$ (221,781)	\$ 708,030	\$ 723,442	\$ 112,249	\$ 531,115	\$ (369,465)	\$ (736,935)	\$ (1,039,448)			
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Cumulative (Over)/Under-Recovery - Prior Month	\$ 792,577	\$ 570,796	\$ 1,278,826	\$ 2,002,268	\$ 2,114,517	\$ 2,645,632	\$ 2,276,167	\$ 1,539,232			
Cumulative (Over)/Under-Recovery	\$ 570,796	\$ 1,278,826	\$ 2,002,268	\$ 2,114,517	\$ 2,645,632	\$ 2,276,167	\$ 1,539,232	\$ 499,784			

	Actual					Estimated				
	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018		
PURPA Purchased Power Capacity Costs	\$ 1,251,489	\$ 1,048,160	\$ 1,126,844	\$ 1,089,472	\$ 2,553,717	\$ 3,517,004	\$ 3,341,130	\$ 2,076,724		
Natural Gas Capacity Costs	\$ 2,434,128	\$ 3,043,138	\$ 4,169,903	\$ 3,635,827	\$ 4,758,845	\$ 4,466,654	\$ 4,538,267	\$ 5,220,184		
Total Costs for the current month	\$ 3,685,617	\$ 4,091,298	\$ 5,296,747	\$ 4,725,299	\$ 7,312,562	\$ 7,983,658	\$ 7,879,497	\$ 7,296,908		
S.C. Retail kWh Sales	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127		
Total System kWh Sales Excluding Off-System Sales	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000		
S.C. Allocation Factor	24.04%	23.65%	24.08%	24.92%	24.74%	24.09%	24.42%	24.84%		
S.C. Share of Capacity Costs	\$ 885,928	\$ 967,633	\$ 1,275,339	\$ 1,177,707	\$ 1,808,834	\$ 1,922,876	\$ 1,924,493	\$ 1,812,786		
Amount Billed to Retail Customers	\$ 1,611,313	\$ 1,332,103	\$ 1,372,813	\$ 1,400,793	\$ 1,598,041	\$ 1,773,954	\$ 1,828,258	\$ 1,754,995		
(Over)/Under-Recovery	\$ (725,385)	\$ (364,470)	\$ (97,474)	\$ (223,086)	\$ 210,793	\$ 148,922	\$ 96,235	\$ 57,791		
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Cumulative (Over)/Under-Recovery - Prior Month	\$ 499,784	\$ (225,601)	\$ (590,071)	\$ (687,545)	\$ (910,631)	\$ (699,838)	\$ (550,916)	\$ (454,681)		
Cumulative (Over)/Under-Recovery	\$ (225,601)	\$ (590,071)	\$ (887,545)	\$ (1,610,631)	\$ (699,838)	\$ (550,916)	\$ (454,681)	\$ (396,890)		

Office of Regulatory Staff
 Details of the Computation of the (Over)/Under-Recovery of Distributed Energy Resource Program Incremental Costs
 Duke Energy Carolinas, LLC
 June 2017 - September 2018
 Docket No. 2018-3-E

	Actual										
	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018			
Purchased Power Agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
NEM* Incentive	\$ 169,485	\$ 180,971	\$ 192,634	\$ 200,057	\$ 163,736	\$ 147,262	\$ 160,463	\$ 167,672			
Solar Rebate Program	\$ 151,422	\$ 156,814	\$ 164,554	\$ 167,508	\$ 168,422	\$ 187,295	\$ 211,084	\$ 212,597			
Shared Solar Program	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Carrying Costs on Deferred Amounts	\$ 147,560	\$ 152,043	\$ 157,864	\$ 162,394	\$ 163,420	\$ 171,430	\$ 192,654	\$ 204,345			
NEM Avoided Capacity	\$ 9,711	\$ 10,386	\$ 11,065	\$ 11,505	\$ 13,490	\$ 14,555	\$ 15,563	\$ 20,823			
NEM Meter Costs	\$ 16,201	\$ 17,397	\$ 18,360	\$ 19,145	\$ 20,242	\$ 21,154	\$ 23,133	\$ 24,187			
General and Administrative Expenses	\$ 83,151	\$ 57,925	\$ 88,950	\$ 39,303	\$ 43,228	\$ 26,329	\$ 39,278	\$ 41,076			
Total Incremental Costs	\$ 577,530	\$ 575,536	\$ 633,427	\$ 599,912	\$ 572,538	\$ 568,025	\$ 642,175	\$ 670,700			
Revenue Collected	\$ 578,608	\$ 585,411	\$ 585,871	\$ 584,504	\$ 443,815	\$ 306,391	\$ 306,538	\$ 306,649			
(Over)/Under-Recovery	\$ (1,078)	\$ (9,875)	\$ 47,556	\$ 15,408	\$ 128,723	\$ 261,634	\$ 335,637	\$ 364,051			
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Cumulative (Over)/Under-Recovery - Prior Month	\$ (4,214,127)	\$ (4,215,205)	\$ (4,225,080)	\$ (4,177,524)	\$ (4,162,116)	\$ (4,033,393)	\$ (3,771,759)	\$ (3,436,122)			
Cumulative (Over)/Under-Recovery	\$ (4,215,205)	\$ (4,225,080)	\$ (4,177,524)	\$ (4,162,116)	\$ (4,033,393)	\$ (3,771,759)	\$ (3,436,122)	\$ (3,072,071)			

	Actual					Estimated				
	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018		
Purchased Power Agreements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
NEM* Incentive	\$ 169,047	\$ 181,854	\$ 242,518	\$ 253,803	\$ 309,394	\$ 322,211	\$ 331,099	\$ 338,791		
Solar Rebate Program	\$ 221,309	\$ 224,129	\$ 225,437	\$ 227,696	\$ 227,720	\$ 228,127	\$ 228,647	\$ 231,204		
Shared Solar Program	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Carrying Costs on Deferred Amounts	\$ 208,349	\$ 212,970	\$ 250,667	\$ 223,757	\$ 223,626	\$ 222,510	\$ 221,655	\$ 221,940		
NEM Avoided Capacity	\$ 20,955	\$ 22,391	\$ 30,199	\$ 32,939	\$ 34,607	\$ 36,094	\$ 37,592	\$ 39,277		
NEM Meter Costs	\$ 25,555	\$ 27,007	\$ 39,136	\$ 41,256	\$ 42,877	\$ 44,490	\$ 46,094	\$ 47,698		
General and Administrative Expenses	\$ 54,664	\$ 46,540	\$ 32,573	\$ 32,239	\$ 42,733	\$ 42,733	\$ 42,733	\$ 42,733		
Total Incremental Costs	\$ 599,879	\$ 714,891	\$ 820,530	\$ 811,690	\$ 880,957	\$ 896,165	\$ 907,820	\$ 921,643		
Revenue Collected	\$ 305,749	\$ 307,566	\$ 306,360	\$ 307,124	\$ 229,401	\$ 228,927	\$ 228,611	\$ 228,569		
(Over)/Under-Recovery	\$ 994,130	\$ 407,325	\$ 514,170	\$ 504,566	\$ 651,556	\$ 667,238	\$ 679,209	\$ 693,074		
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Cumulative (Over)/Under-Recovery - Prior Month	\$ (3,072,071)	\$ (2,677,941)	\$ (2,290,953)	\$ (1,466,179)	\$ (966,262)	\$ (314,706)	\$ 352,532	\$ 1,031,741		
Cumulative (Over)/Under-Recovery	\$ (2,677,941)	\$ (2,290,953)	\$ (1,466,179)	\$ (966,262)	\$ (314,706)	\$ 352,532	\$ 1,031,741	\$ 1,724,815		

* NEM - Net Energy Metering
 Explanations of Adjustments (E), (F) and (G) are included in testimony of Anthony D. Briscoe.

Office of Regulatory Staff
 Details of the Computation of the (Over)/Under-Recovery of Distributed Energy Resource Program Avoided Costs
 Duke Energy Carolinas, LLC
 June 2017 - September 2018
 Docket No. 2018-3-E

	Actual										
	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018			
Purchase Power Agreements	\$ 9,485	\$ 4,609	\$ (12,571)	\$ 395	\$ 326	\$ 245	\$ 169	\$ 1,880			
Shared Solar Program	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total Avoided Costs	\$ 9,485	\$ 4,609	\$ (12,571)	\$ 395	\$ 326	\$ 245	\$ 169	\$ 1,880			
S.C. Retail kWh Sales	1,840,787,327	2,004,626,644	2,045,712,681	1,907,259,402	1,664,779,554	1,604,311,093	1,689,291,924	2,004,246,555			
Total System kWh Sales Excluding Off-System Sales	7,382,797,262	8,213,697,211	8,242,499,300	7,632,543,035	6,668,383,285	6,410,573,998	7,057,410,509	8,697,594,873			
S.C. Allocation Factor	24.93%	24.41%	24.82%	24.99%	24.97%	25.03%	23.94%	23.04%			
S.C. Share of Avoided Costs	\$ 2,365	\$ 1,125	\$ (3,120)	\$ 99	\$ 81	\$ 61	\$ 40	\$ 433			
Amount Billed to Retail Customers	\$ (27,141)	\$ (30,303)	\$ (30,801)	\$ (28,285)	\$ (17,456)	\$ (7,643)	\$ (9,667)	\$ (14,174)			
(Over)/Under-Recovery	\$ 29,506	\$ 31,428	\$ 27,681	\$ 28,384	\$ 17,537	\$ 7,704	\$ 9,707	\$ 14,607			
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Cumulative (Over)/Under-Recovery - Prior Month	\$ (235,095)	\$ (205,589)	\$ (174,161)	\$ (146,480)	\$ (118,096)	\$ (100,559)	\$ (92,855)	\$ (83,148)			
Cumulative (Over)/Under-Recovery	\$ (205,589)	\$ (174,161)	\$ (146,480)	\$ (118,096)	\$ (100,559)	\$ (92,855)	\$ (83,148)	\$ (68,541)			

	Actual					Estimated				
	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018		
Purchase Power Agreements	\$ 487	\$ 23,919	\$ 17,442	\$ 424	\$ 454	\$ 438	\$ 377	\$ 368		
Shared Solar Program	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Avoided Costs	\$ 487	\$ 23,919	\$ 17,442	\$ 424	\$ 454	\$ 438	\$ 377	\$ 368		
S.C. Retail kWh Sales	1,791,706,347	1,524,004,658	1,584,758,862	1,640,451,950	1,829,860,637	1,979,919,610	2,053,956,924	1,986,163,127		
Total System kWh Sales Excluding Off-System Sales	7,453,819,034	6,443,723,578	6,581,829,396	6,581,962,808	7,397,566,722	8,220,497,571	8,409,562,198	7,994,793,000		
S.C. Allocation Factor	24.04%	23.65%	24.08%	24.92%	24.74%	24.09%	24.42%	24.84%		
S.C. Share of Avoided Costs	\$ 117	\$ 5,657	\$ 4,200	\$ 106	\$ 112	\$ 105	\$ 92	\$ 91		
Amount Billed to Retail Customers	\$ (10,714)	\$ (7,945)	\$ (7,919)	\$ (7,582)	\$ (9,440)	\$ (11,502)	\$ (11,617)	\$ (10,800)		
(Over)/Under-Recovery	\$ 10,833	\$ 13,602	\$ 12,119	\$ 7,688	\$ 9,552	\$ 11,607	\$ 11,709	\$ 10,891		
Company Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
ORS Accounting Adjustments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Cumulative (Over)/Under-Recovery - Prior Month	\$ (68,541)	\$ (57,710)	\$ (44,108)	\$ (31,989)	\$ (24,301)	\$ (14,749)	\$ (3,142)	\$ 8,567		
Cumulative (Over)/Under-Recovery	\$ (57,710)	\$ (44,108)	\$ (31,989)	\$ (24,301)	\$ (14,749)	\$ (3,142)	\$ 8,567	\$ 19,458		